

COE “Workshop series for strengthening capacity to manage child and adolescent TB”

Session 3: Adapting or developing a national capacity building strategy for child and adolescent TB, incorporating best practices for adult learning

Date: Tuesday 14 June 2022

Moderator: John Paul Dongo



Session 3 Agenda (Cohort 1)



- 1) Opening Remarks (John Paul Dongo)
- 2) Introductions (John Paul Dongo)
- 3) Session 2 recap and Session 3 outline (John Paul Dongo)
- 4) Presentation: Incorporating best practices for adult learning (Amalia King)
- 5) Using ADDIE to adapt or develop a national capacity building strategy (Amalia King)
 - o Practical: Fishbone Analysis (Brittany Moore)
- 4) Closing remarks (Riitta Dlodlo)

Remind ourselves - who is present for session 3!

- Quick round of introductions (*Name, Organisation/Country and position title*)
- Member countries
 - Tanzania
 - Mozambique
 - Eswatini
- CDC
- The Union

Tanzania



- Allan Tarimo
- Mandala Adam
- Issa Sabi
- Bhavin Jani
- Peter Neema

Mozambique



- Criménia Mbate Mutemba
- Benedita José
- Yolanda Cachomba
- W. Chris Buck

COE CDC Team



Amalia King



Brittany Moore

COE Union Team



John Paul Dongo



Ritah Mande



Riitta Dlodlo



Selma Dar Berger



Session 2 recap, session 3 outline, and workshop series running schedule

John Paul Dongo, Country Director, The Union Uganda office

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Health solutions for the poor



2. South-to-south experience sharing

Objectives

1. Share findings from countries' review of national training strategies, training materials and staff training needs for child and adolescent TB (post-session 1 work)
2. Identify common strengths, weaknesses, opportunities, and threats (SWOT analysis) across countries

Post-session work completed by country team

- Access resources and background reading for Session 3 on effective training approaches and adult learning theory
- Conduct country-specific SWOT analysis based on review

3. Adapting/developing a national capacity building strategy for child and adolescent TB

Objectives

1. Describe adult learning theory and effective training techniques for adult-learners
2. Use learner-centered ADDIE model (Assess, Design, Develop, Implement and Evaluate) to adapt and/or develop a national capacity building strategy for child and adolescent TB

Post-session work completed by country team

Assess:

- Conduct root cause analysis to determine root causes of challenges for successfully implementing child and adolescent TB activities in country

Design:

- Brainstorm solutions/interventions for root causes that are identified as within the country's control to change/improve and can be improved through capacity building (root causes related to poor workforce skills, knowledge, and attitudes)
- Use impact resource matrix to start prioritizing solutions/interventions based on impact and resources needed

One-on-one country touch base discussion with COE Team 4-6 weeks after Session 3

Session calendar

No	Session	Dates	Duration
1	Let's get started: What is the COE "Workshop series for strengthening capacity to manage child and adolescent TB" - Introduction.	30 th March 2022	1 hour 30 minutes
2	Sharing findings from countries' review of their national training strategy, training materials, and staff training needs for child and adolescent TB	19 th May 2022	1 hour 30 minutes
3	Adapting and/or developing a national capacity building strategy for child and adolescent TB, incorporating best practices for adult learning	14 th June 2022	1 hour 30 minutes
4	South-to-south experience sharing: Real-life country experiences of implementing public health capacity-building strategies!	TBD	1 hour 30 minutes
5	Sharing countries' national child and adolescent TB capacity-building strategies	TBD	1 hour 30 minutes

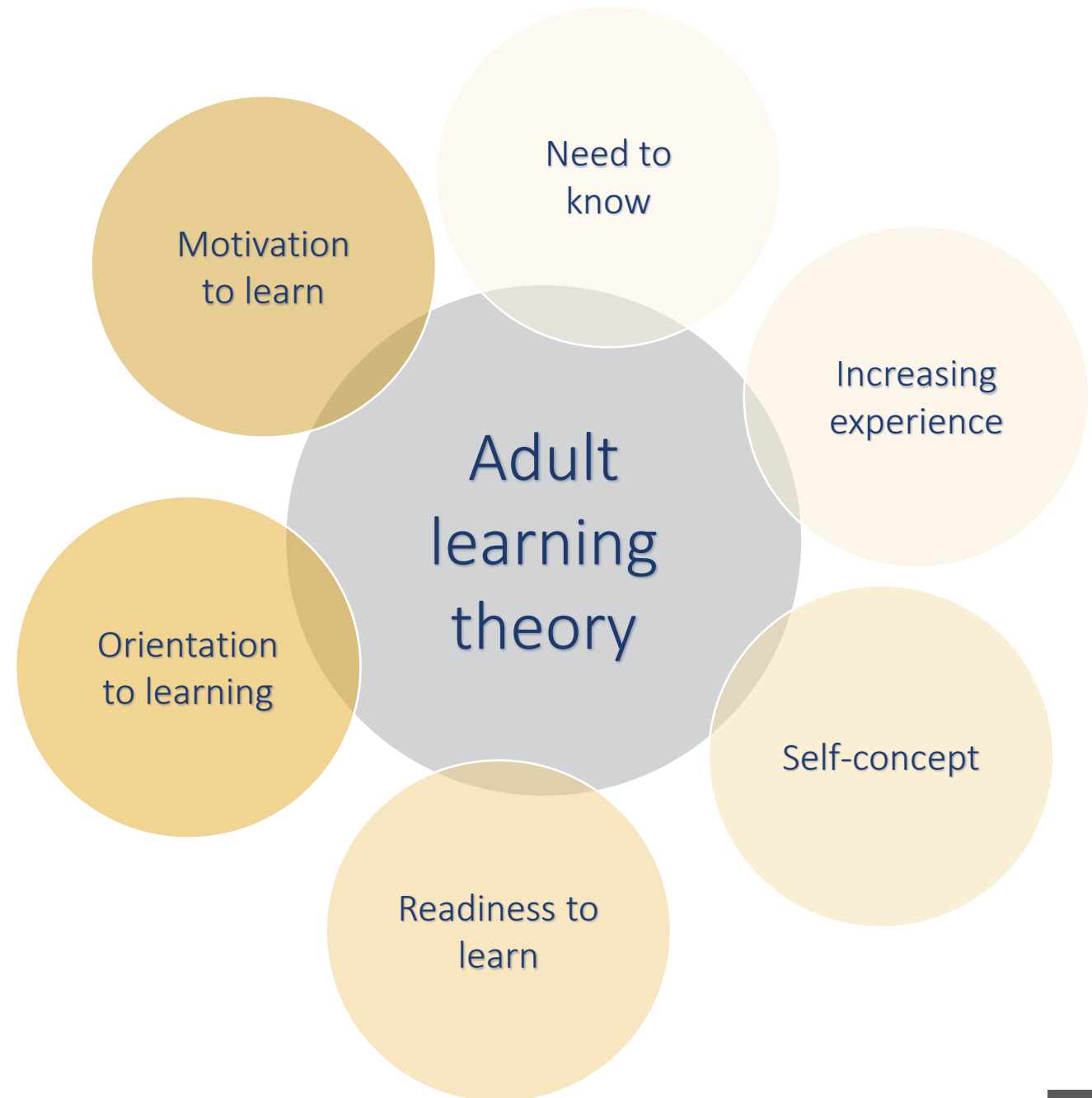


Incorporating best practices for adult learning

What is andragogy?

Let's talk about theory

- 1968 – Malcolm Knowles introduced the concept of andragogy – today commonly known as ‘adult learning theory’
- Best practices for adult learning are not novel!
- Watch this [video](#) to learn more!



How to reach adult learners

- Content must be immediately useful and relevant
 - Adults need to connect their experience to the ‘learning’ to make it relevant
- Environment should be welcoming
- Methodology should be engaging
 - Avoid (to the extent possible) didactic methods
 - Employ participatory methods, that support participants to ‘lead’ their learning and share their experiences, successes and challenges
- Be respectful
- Employ capacity building methods that utilize different learning styles
 - We all learn differently! Adults can be visual, auditory or kinesthetic learners

Tips and tricks for ‘reaching’ learners

To reach visual learners...

- Supplement verbal lectures with visuals
- Incorporate color into presentations and visuals
- Provide written instructions
- Incorporate solitary reading time
- Show participants how to complete a task instead of just ‘telling’ them how
- Use videos and images
- Provide written feedback

To reach auditory learners...

- Read aloud (scenarios, handouts, etc.)
- Group discussions
- Provide verbal feedback and instructions
- Use videos
- Verbal report-out (e.g., from group session)

To reach kinesthetic learners...

- Integrate hands-on experience (through visiting sites, etc.)
- Utilize both in-classroom and outside the classroom spaces
- Create visuals as part of a case study, such as a timeline, chart, or graph
- Ask participants to physically move (such as a round-robin station where participants move from one station to another)

Example: Learning style questionnaire

For in-person trainings, it may be useful to conduct a 'learning style questionnaire' at the beginning of the training

Learning Styles Questionnaire

Complete the following questionnaire by ticking the appropriate box to discover your preferred learning style.

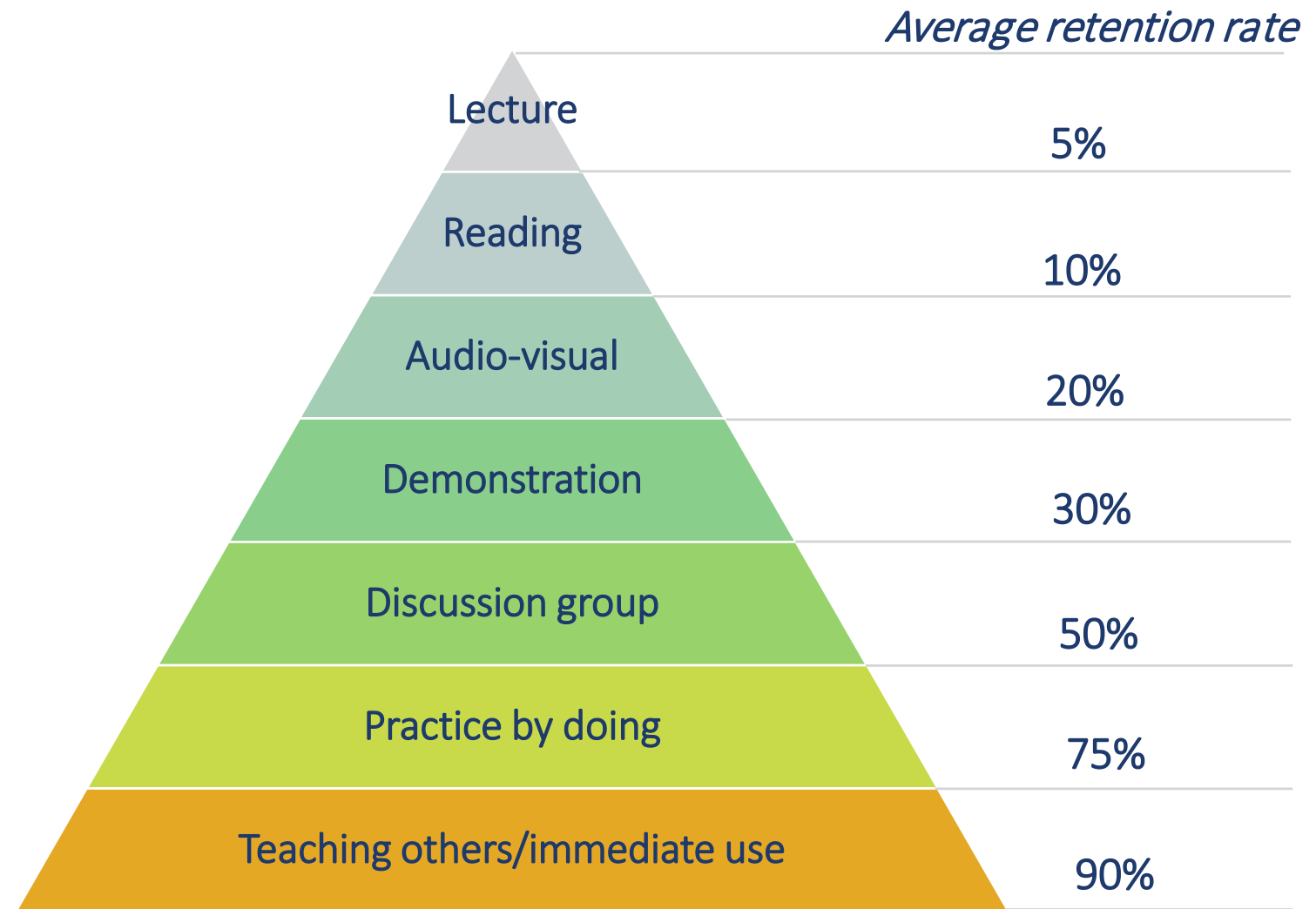
		Often	Sometimes	Seldom
1	Can remember more about a subject through listening than reading.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Follow written directions better than oral directions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Like to write things down or take notes for visual review.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Press down extremely hard with pen or pencil when writing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Require explanations of diagrams, graphs or visual directions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Enjoy working with tools.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Enjoy developing and making graphs and charts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Can recall an acquaintance's voice more than their face.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Remember best by writing things down several times.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Participants completing an EPI monitoring chart as part of a case study to improve the quality and use of EPI data

'Cone' of learning: power of active learning

- **Passive learning:** lecture, reading, audiovisual (like watching a demonstration)
- **Active learning:** discussion, practice, teaching others
- Not an exact science!





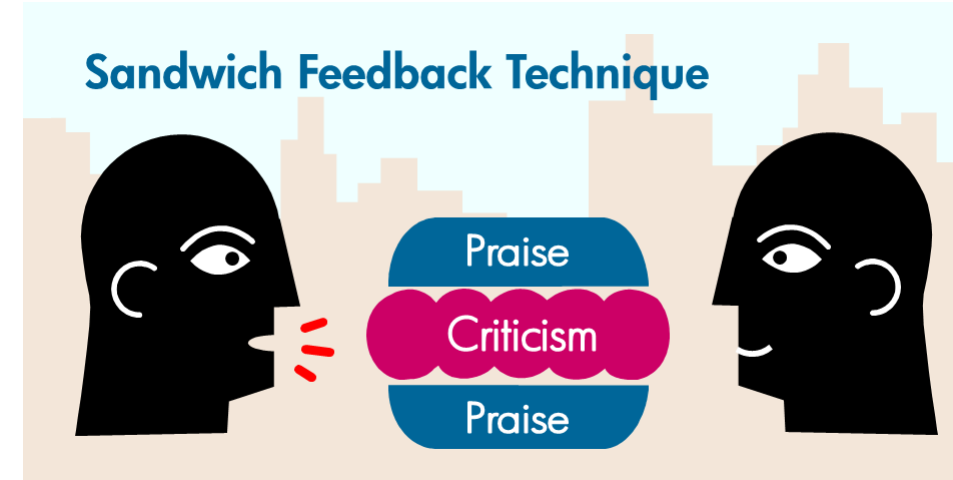


What are some other considerations? (1)

- What is the primary language of your target audience? In what language will the ‘capacity building’ be facilitated?
- Participatory methodology can also assist facilitators or mentors to identify pre-conceived assumptions by adult learners, that may be true or false
- Are there any cultural influences to be aware of?
- Helpful to ‘break the ice’ – consider including methods or sessions that help participants get to know each other
- Incorporate methods that seek feedback from participants on the content, but also the time, place and other aspects of the training and mentorship
 - Too long? Too short? Room too cold? Not enough space to do the activity?

What are some other considerations? (2)

- Build trust with your target audience! They should feel safe sharing their thoughts (even if they don't know the 'correct answer')
- Feedback sandwich
- Using participatory methodologies increases time needed as compared to didactic sessions
- Lead by example! This will continue to motivate and inspire your target audience



IDEA LEARNING IDEAS CREATIVITY SURVEY PERSPECTIVE
PRODUCTS OPPORTUNITY SWOT COMMERCE MISSION B2B COM OBJECTIVE

LEARNING

OPPORTUNITY HIGH COMPETENCE COMMERCE DEFINITION SWOT VALUES
SURVEY LOYALTY OPPORTUNITY LOW IDEA

Using ADDIE to adapt or develop a national capacity building strategy for child and adolescent TB

ADDIE Model

of Instructional Design



ADDIE (Assess)- what works and what doesn't?

- What is 'new' or can be 'improved' for child and adolescent TB in my country?

Examples: what is new

- Updated WHO guidance for child and adolescent TB released early 2022
 - Updated guidance on diagnosis of TB in children, including urine LAM and NPA or stool-based diagnosis on GeneXpert
 - Shorter treatment regimens for non-severe TB
 - Any other programmatic updates relevant to prevention, diagnosis, care, and treatment of TB for children and adolescents

Examples: what can be 'improved'

- Case notifications among children are below WHO recommended 10-15% threshold of annual case notifications
- Challenges with diagnosing TB among children, including lack of screening at health entry points that serve children, lack of confidence in providers to make clinical diagnoses, lack of access to sample collection or diagnostic testing equipment and commodities, and slow results reporting leading to loss to follow-up
- Low contact investigation rate or lack of understanding of knowledge of the role of contact investigation in identifying children with TB or eligible for TPT
- Low TPT initiation and/or completion among children and adolescents
- Poor treatment outcome or loss to follow-up during treatment
- Lack of proper documentation or results reporting through the national surveillance system

ADDIE (Assess) - Root cause analysis

- Country teams have already completed **assessments** and **SWOT analysis** to understand the context of child and adolescent TB in their country
- **Root cause analysis** is another tool to help countries identify ‘root causes’ of a performance problem
- Performance issues are often caused by a multitude of root causes, whereby only some (related to **poor workforce skills, knowledge, attitudes**) may be improved through capacity building
- If workforce **knowledge, skills, or attitudes** are not the root cause of a performance problem, then training or other workforce capacity-building strategies may not have the desired impact

ADDIE (Assess) – Root cause analysis

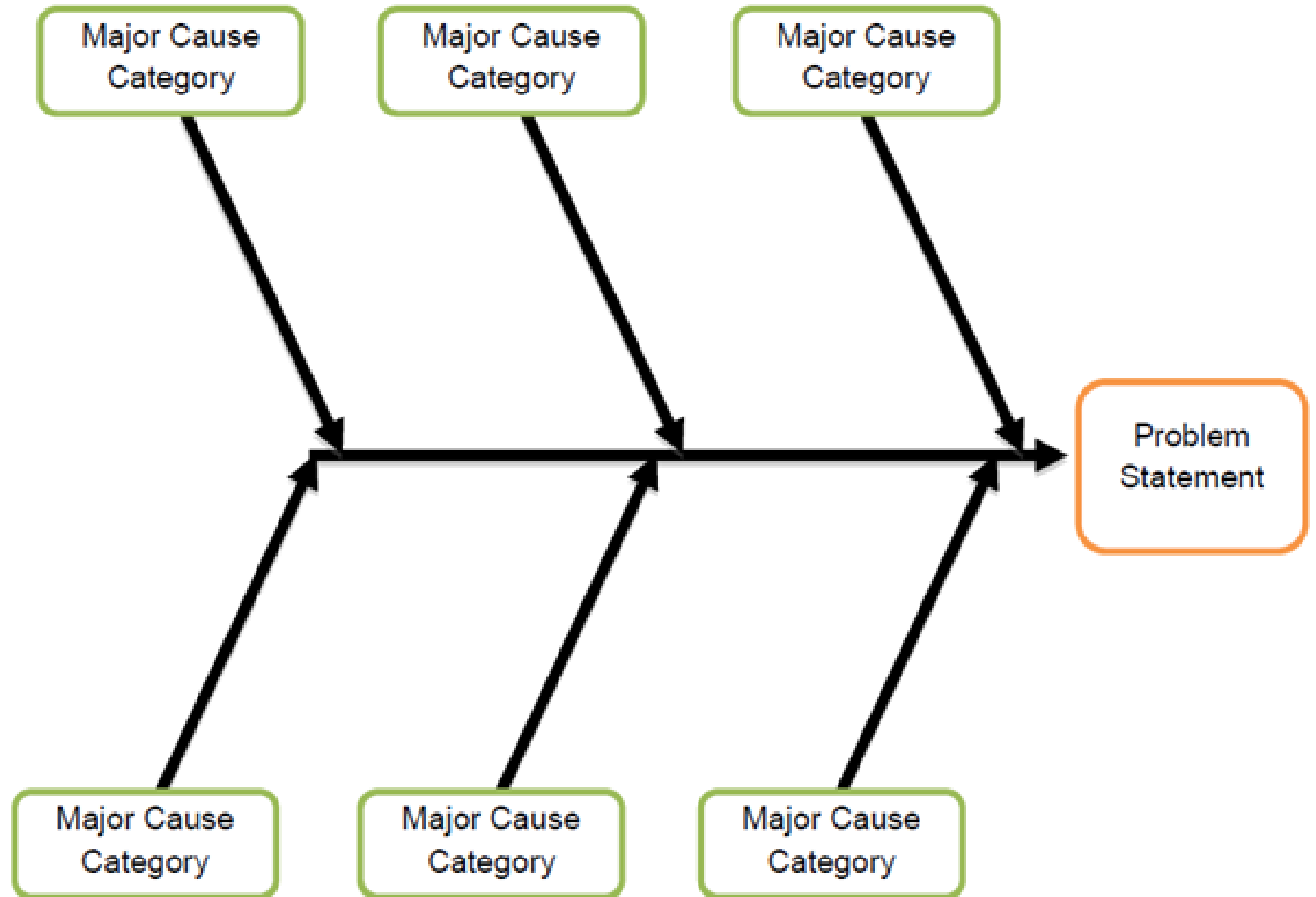
- Conducting root causes analyses can help countries dissect complex child and adolescent TB challenges, gaps, and performance issues
- Countries can identify which root cause(s) are within their control or outside their control to change
- If a root cause is completely outside the country's control, best to focus energy and resources on root causes that are within the country's control

For example: suppose commodity issues affect diagnosis and clinician knowledge of when to seek evaluation. In that case, the capacity building effort can design an intervention to improve clinical knowledge and build clinician confidence while flagging for the NTP that this intervention will not have the desired effect without commodity procurement and distribution changes

ADDIE (Assess) – Root cause analysis

- May not be possible for a country to address all root causes of a performance issue, especially those causes that are completely or partially outside the country's control
- Countries may not have sufficient financial or human resources to immediately address all causes simultaneously
- Countries should focus their immediate efforts and resources on root causes that are totally or partially within their control and have the greatest impact
- If additional resources are needed, country teams can use findings and plan developed from this workshop series to advocate for additional funds (e.g., Global Fund applications)

Fishbone analysis template



ADDIE (Assess) – Using TPN in Root Cause Analysis

- Use TPN methodology to identify if a cause is totally (T) within your control, partially (P) within your control, or not (N) within your control
- Focus your efforts on root causes that are related to workforce skills, knowledge or attitudes

T	Totally within your control to improve
P	Partially within your control
N	Not in your control

members -

- Anthony
- Emma Sam
- Justus
- Eliab
- Albert
- Imelda.



Tip: use poster paper to conduct your root cause analyses!



Practical: Root Cause Analysis (15-20 minutes)

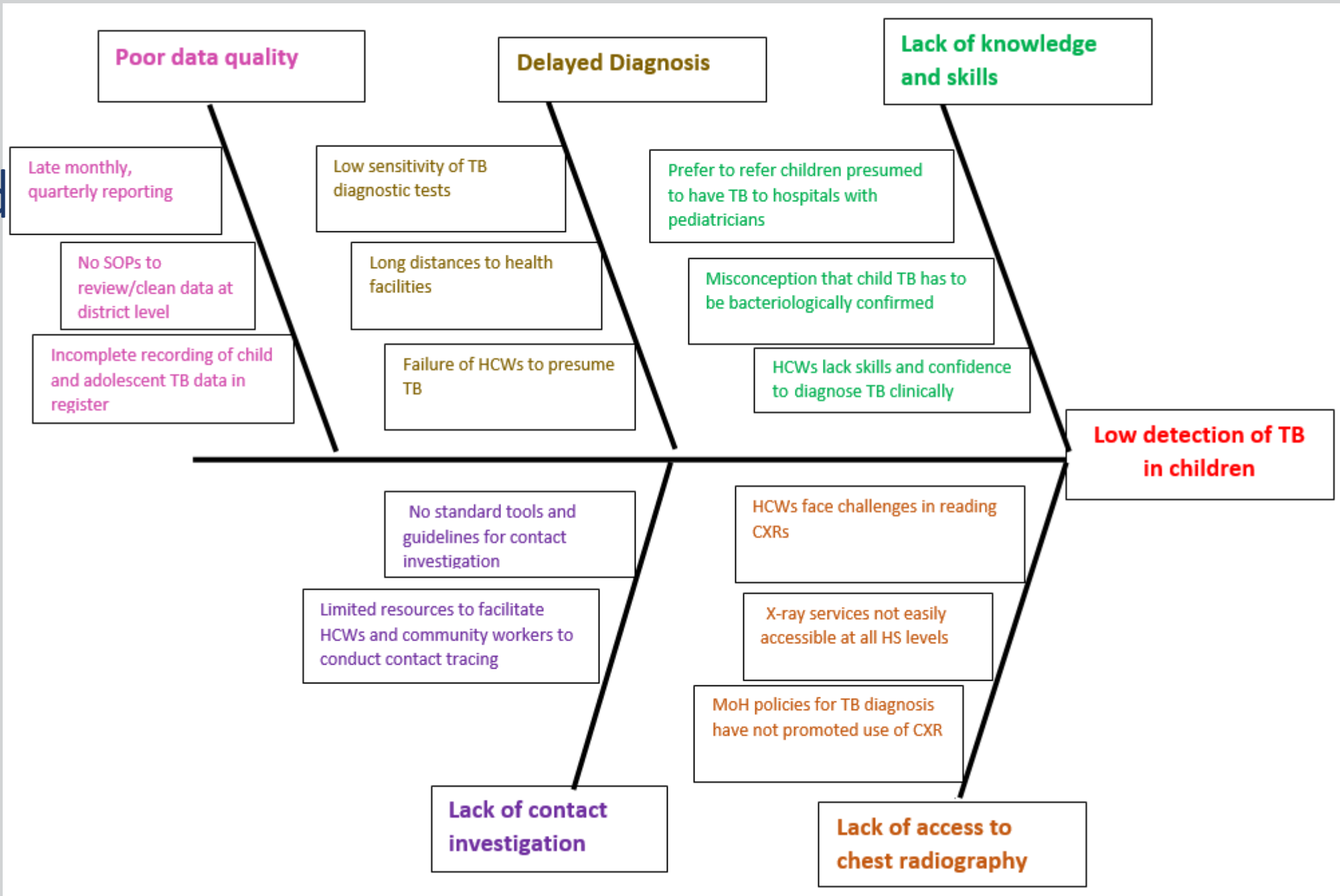


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Example: Completed fishbone analysis



ADDIE (Design)

- Design of any capacity-building strategy should target the root cause(s) of the challenge(s) and should be within the countries' control to address
 - You likely are facing more than one challenge and have completed more than one fishbone analysis!
 - Identify all target audiences from your fishbone analyses
- Tailor solutions to the target audience and 'root cause' being faced
 - Solutions may be different based on the health system level or target audience identified
- There is no one size-fits-all solution – it doesn't exist
- Be creative!

ADDIE (Design)

- Remember, health systems are multifaceted and complex in nature
- What changes? Everything, all the time
- Design solutions that ensure staff at all levels of the health system maintain adequate skills, knowledge and attitudes (motivated!) to achieve national TB program objectives now and in the future
- If you believe a one-off activity is an important component, think about how those knowledge, skills and attitudes will be sustained?
- Solutions should be dynamic, systems-focused and responsive to build and sustain workforce capacity

ADDIE (Design) – Creativity is key

- Be creative – think outside of the box
- No idea is a bad idea!
- Creativity doesn't need to be 'new' – it can also be 'reimagining' something that already exists
- Some ideas to get you brainstorming:
 - Organize field deployments as internships for masters of public health, informatics or other students
 - Create WhatsApp groups for nurses and doctors to discuss topics of child and adolescent TB in districts
 - Ask health facilities to nominate nurses or doctors working in child and adolescent TB, with the winner being featured on a new job aid/poster

ADDIE (Design) – More ideas!

- Invite stakeholders supporting adolescent health to quarterly review meetings at district/health facility level
- Incorporate child and adolescent TB in supportive supervision checklists
- Invite nurses from a hospital in each district to the capital for a workshop on ‘strategizing child and adolescent TB’ at the community level
- Integrate surveillance of child and adolescent TB as part of EPI immunization house-to-house campaigns (for e.g., OPV)
- Develop mentorship program for nurses at different health facilities (assign mentor and mentee, support them to meet once a month)
- Incorporate child and adolescent TB content in nursing or medical training

ADDIE (Design) – Importance of multifaceted strategies

“Effectiveness of strategies to improve healthcare provider practices in low-income and middle-income countries: a systematic review.” (A. K. Rowe, S. Y. Rowe, D. H. Peters, K. A. Holloway, J. Chalker and D. Ross-Degnan. *The Lancet Global Health* 2018 Vol. 6 Issue 11 Pages e1163-e1175)

- Research suggests that strategies to improve health-care provider performance in low- and middle-income countries are generally more effective when they include multiple components as opposed to a single component

ADDIE (Design)– Importance of multifaceted strategies

- Systematic review conducted by Rowe, et al. 2018 found that while “training or supervision alone typically had moderate effects, combining training and supervision, or trainings with other strategies such as group problem solving, had larger effects than use of either strategy alone.”
- They also found that while “multi-faceted strategies had large effects, they were not always more effective than simpler ones”
- So, “decision-makers should not assume that increasing the number of strategy components will increase a strategy’s effectiveness”
- While multifaceted strategies are generally more effective, there is a threat that these strategies could be convoluted, too complex, or so large that the resources devoted to each component are diluted

ADDIE (Design) – Importance of multifaceted strategies

- Improved knowledge, skills and attitudes do not in and of themselves improve health-care provider performance,
- However, they are critical prerequisites to improving health-care provider performance
- Ultimately, improving health-care provider performance “should lead to stronger health systems and better health outcomes for individuals and populations”

That’s our goal!

ADDIE (Design) – Importance of multifaceted strategies

- Rowe, et al. 2018 importantly posited that performance gaps will still likely remain after implementation of improvement strategies
- For example, “assuming typical baseline performance of 40% and an optimistic strategy effect of 30 percentage points, post-intervention performance would be 70%”
- Implementing capacity building strategies will never result in ‘perfect’ health-care worker performance
- Challenges such as staff turnover, insecurity, or poor infrastructure (such as roads, buildings, etc.) will likely always impact the extent to which an intervention is effective



Teams practicing what they learned in training at a site and mentoring healthcare workers

Teams practicing
what they learned in
training at a site and
mentoring
healthcare workers



ADDIE (Design) – Impact resource matrix

- Strategy should focus on high-impact strategies that are able to be implemented by the country using available or soon to be available resources
- May be useful to also design ‘aspirational’ strategies you consider high-impact, even if resources are not available
 - Consider including these strategies in Global Fund applications!
- Focus your immediate efforts on strategies (as much as possible) that are high-impact and able to be implemented using available resources (or may soon be available)

ADDIE (Design) – Impact resource matrix

- Complete an impact resource matrix to stratify strategies by impact and resources required to implement strategies
- High-impact and low-resource interventions are considered ‘quick wins’
- Interventions that are low-impact, yet high-resource are usually not worth the effort

Low-impact and high-resource	High-impact and high-resource
Low-impact and low-resource	High-impact and low-resource

ADDIE (Design)

- Remember, your overall strategy design should:
 - Use best practices for adult learning and incorporate effective training techniques/methodologies
 - Include multiple intervention components such as training, supervision, mentorship, on-job training, and/or group problem solving
 - Focus on high-impact interventions that the country can implement using available (or soon to be available) resources
- Lastly, think about multiple touch points
 - In general, it takes several different ‘touch points’ for something new or different to become familiar and part of our normal routine
 - Don’t assume that a one-off training or a single mentorship visit will ‘resolve the challenge’

ADDIE (Develop)

- Third phase of ADDIE is to develop content and materials for the capacity building strategy
- May not be necessary to develop all new content and materials, as content, materials, tools or other relevant resources may already exist

First step	Second step
Identify what resources (content, materials) are needed to implement the capacity building strategy	Identify any existing resources that could be used or adapted in order to implement the strategy

- Sequence is critical – if reversed, there is the possibility that existing resources would determine the direction, scope, or other aspects of strategic implementation

ADDIE (Develop)

- If it is possible to incorporate and use an existing resource as is – great
- If the resource needs to be updated and/or adapted in some way, it may be useful to consider if the process of updating or adapting is more time consuming than developing the resource all together
- Implementing large-scale strategies (such as national or semi-national implementation) brings added risk that the strategy could be implemented differently by different stakeholders (individuals or organizations)

Make sure everyone gets the ‘same dose of medicine’

- Consider developing resources not only for the adult learners, but also for the stakeholders themselves with the aim of standardizing (as much as possible) implementation of the strategy

ADDIE (Develop)

- Best practice during the ‘development’ phase is to develop specific, measurable, attainable, relevant and time-bound (also known as SMART) objectives for each component of the capacity building strategy
- Objectives can be helpful to ensure that as resources and content are developed, they maintain focused and targeted
- Findings from the ‘assess’ and ‘design’ phases should actively guide the ‘development’ phase, including development of objectives



ADDIE – Other considerations

- Consider a strategy that also ‘builds capacity’ of the next generation of public health professionals



Supplemental information (but not required)

- Process to develop objectives would ideally be based on pre-defined workforce competencies that align with the national TB program's objectives
- Many definitions of competency, however we prefer the following:

“Competency is defined as the combination of observable and measurable knowledge, skills, abilities, and personal attributes that contribute to enhanced employee performance and ultimately result in organizational success”

Supplemental information (but not required)

- While standardized competencies would positively support a national program's efforts to build their workforce capacity, standardized competencies are not a prerequisite to implementing capacity building strategies
- Please note: The COE is not asking country teams to develop standardized competencies for their health workforce on child and adolescent TB (though would be a valiant effort!)

Traicoff, D., Pope, A., Bloland, P., Lal, D., Bahl, J., Stewart, S., . . . Sandhu, H. (2019). **Developing standardized competencies to strengthen immunization systems and workforce.** *Vaccine*, 37(11), 1428-1435.

doi:10.1016/j.vaccine.2019.01.047

Conclusion & next steps

- 1) COE team (Union & CDC) will schedule one-on-one meetings with Country teams after completing their country Fishbone Analysis (before Session #4)
 - Please complete your fishbone analyses within the next 4 -6 weeks
 - Union team will reach out to schedule one-on-one meetings with country teams
- 2) COE happy to provide additional guidance to COE teams in developing their national capacity building strategies for child and adolescent TB
- 3) Union team will reach out with a doodle poll to schedule Session #4

We wish teams the best of luck with this next (huge) step of the workshop series!

4. South-to-south experience sharing: Country experiences of implementing public health capacity-building strategies!

Objectives

1. Become familiar with successful capacity-building strategies used in other countries and public health programs

Post-session work completed by country team

- Begin shaping a document that links capacity building solutions and strategies with identified problems/barriers/performance issues
- Identify and integrate best practices/lessons learned from south-to-south learning into the country's national child and adolescent TB capacity building strategy
- Develop broad costing estimates for each intervention, including annual budgets for ongoing activities, if applicable.

Deliverable: Country team develops a presentation summarizing proposed components of national capacity building strategy for child and adolescent TB.

Questions?



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Closing remarks

Dr Riitta Dlodlo, MD, DMCH, MPH

Senior Advisor

The Union

The Union

International Union Against
Tuberculosis and Lung Disease
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Thank You

U.S. Centers for Disease Control & Prevention/Division
of Global HIV & TB/Global TB Branch

Brittany Moore: bkmoore@cdc.gov

Amalia King: xka1@cdc.gov

The International Union Against TB & Lung Disease/
The Department of Tuberculosis

John Paul Dongo (The Union/Uganda): jpdongo@theunion.org

Riitta Dlodlo (The Union): rdlodlo@theunion.org

Ritah Mande (The Union/Uganda): Ritah.Mande@theunion.org

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